

Montana DEQ Forest Fire Smoke Advisory

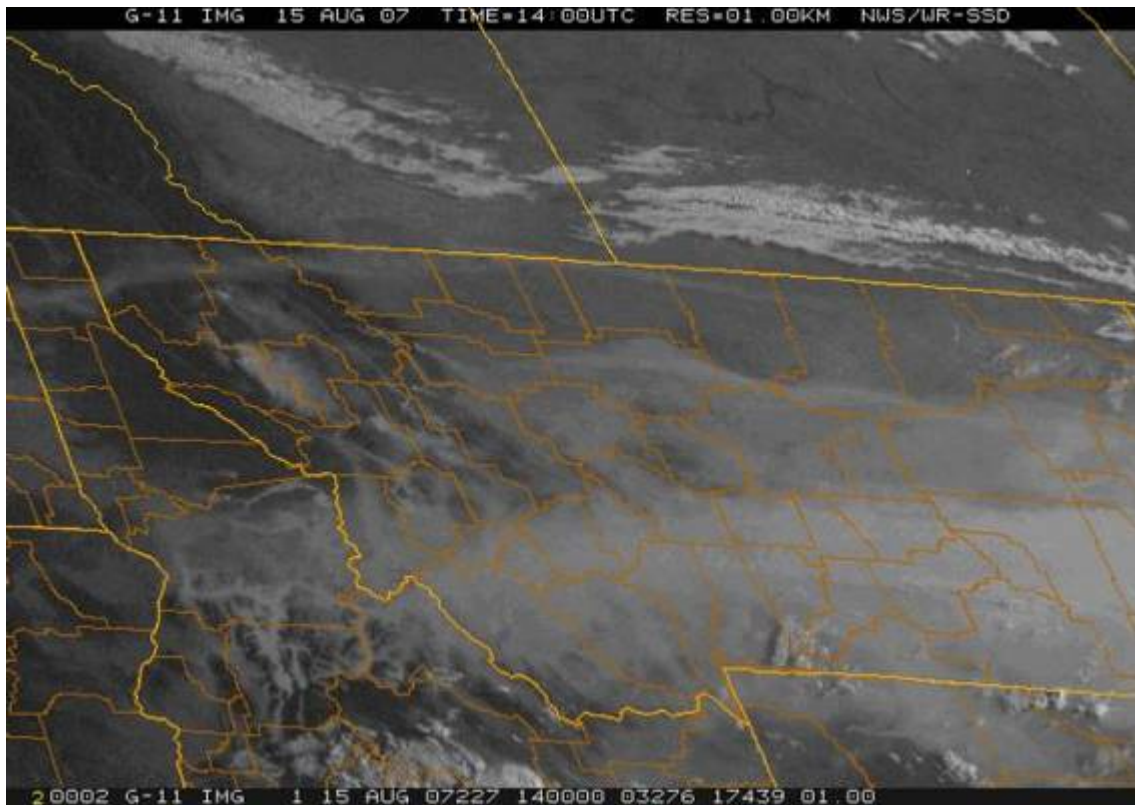
August 15 2007

10:00 AM Wednesday

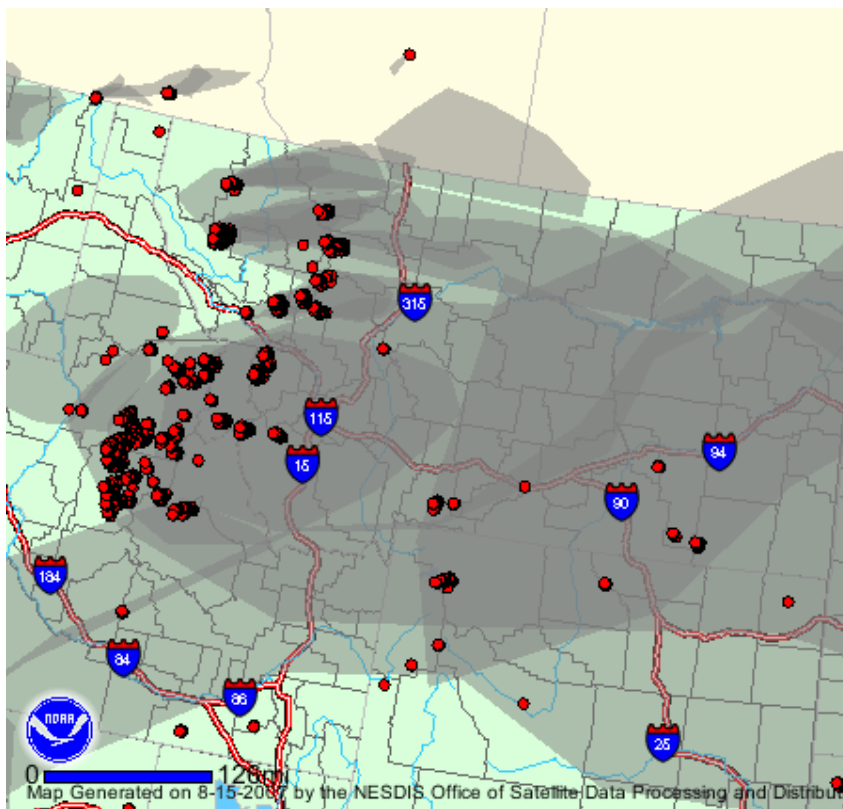
Current Situation

Another smoky day is on tap this morning with a large plume of smoke aloft stretching across the center of the state and lots of smoke trapped in the valleys of western and southwestern Montana. [UNHEALTHY](#) levels are currently impacting Hamilton, Butte, Dillon, Helena, and Livingston. Whitefish, Kalispell, Missoula, West Yellowstone, Bozeman, Great Falls, and Choteau are all at [UNHEALTHY FOR SENSITIVE](#) at this time. Smoke conditions in some of the valleys with active fires are expected to be [UNHEALTHY](#) or worse. Many other areas of the state with no reporting mechanism are also being impacted today. Residents near active fires or experiencing noticeable smoke levels should use the [VISIBILITY GUIDELINES](#) to determine smoke levels in their area and guide their activity decisions. Smoke aloft will mix down in many areas later this morning and direct smoke impacts from active fires will also be a problem again this afternoon. See the forecast at the bottom for details.

Morning satellite photo centered on Great Falls:



This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last night's satellite coverage)

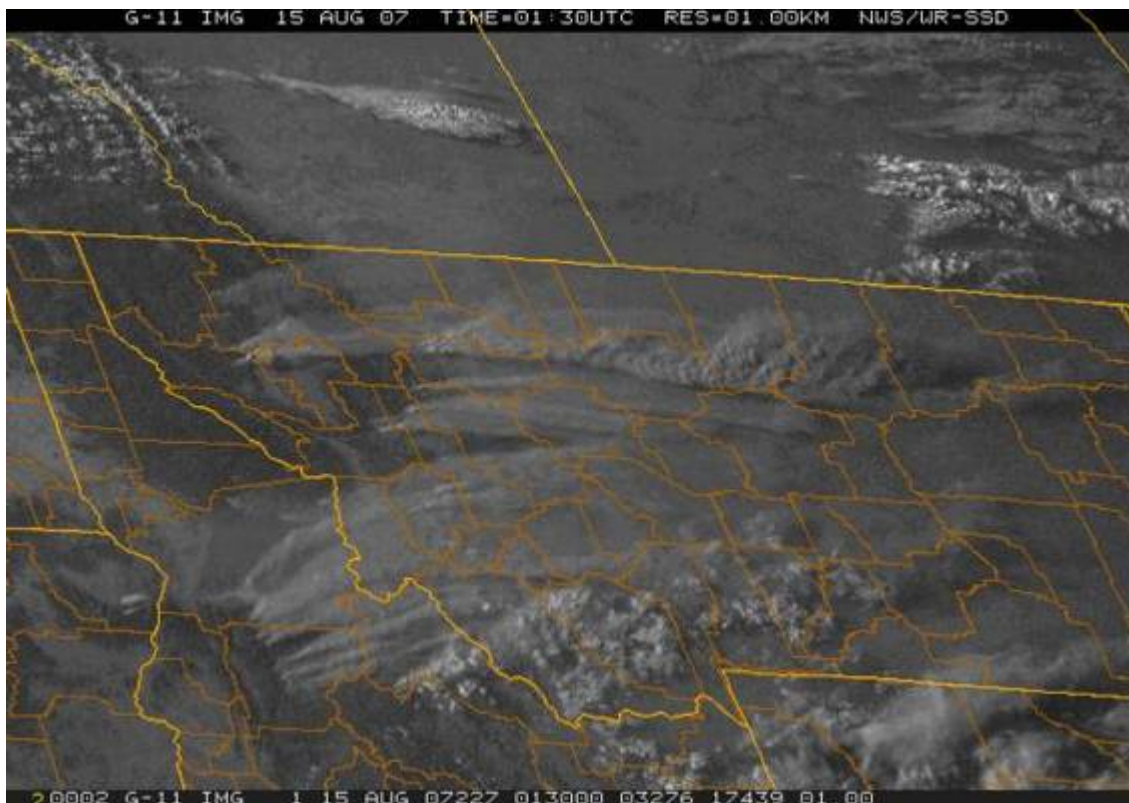


Red indicates hot spot detected. Grey represents smoke seen by satellite.
Fire size is exaggerated for visibility at this scale.

To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lg_fire2.php

This satellite photo from 7:30 PM last night shows another day with plumes of smoke rolling across the state from the fires in Idaho and Montana. There was less smoke last night than the previous two days. The smoke is still thick enough to limit surface heating and thus produce stagnant conditions in the bottom of some valleys where nocturnal inversions do not heat out.



Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

Updated 10 AM August 15, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

<u>HAZARDOUS</u>	
<u>VERY UNHEALTHY</u>	
<u>UNHEALTHY</u>	Hamilton T24 Butte T24 Dillon Vis(8) Helena T24 Livingston Vis(8)
<u>UNHEALTHY FOR SENSITIVE GROUPS</u>	Kalispell T24 Whitefish T24 Missoula T8 Bozeman Vis(8) Choteau T24 Great Falls Vis(8) West Yellowstone T1
<u>MODERATE</u>	Polson T24 Ronan T24 Lewistown Vis(1)

T1(x)	One-hour TEOM or BAM value (number of values)
T8(x)	Eight-hour average TEOM or BAM value(number of values)
T24	24 hour average TEOM or BAM value
Vis(x)	Visibility value(number of hours)
Vis(am/pm)	Visibility value from twice/day reporting stations
(est)	estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local visibility guidelines to evaluate possible health risks and make informed activity decisions.

Forecast

Conditions are favoring another day of active fires with large plumes and plenty of smoke. Transport will be from the west southwest and direct plume impacts will be occasionally severe. Smoke will continue to be trapped in the valleys of western Montana and when the smoke aloft mixes down later this morning, wide areas of the state will see smoke at the surface for a few hours. Hazy sky will persist across the state under the plume overhead. Smoke will thin out during the afternoon in some of the areas that are being heavily impacted this morning but the relief will be brief in most areas. Smoke

levels will be intermittently very bad with some clearing as the plumes move around. Residents downwind of the active fires and experiencing impacts from residual smoke will need to pay close attention to conditions in their area and use the [visibility guidelines](#) to guide their activity decisions as the situation changes.

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Meteorologist

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